

WHAT IS CLAIMED IS:

1. A storage resource operation managing method in a storage network arranged by a node for transmitting an access request via a network to a storage and by a storage group constituted by at least one storage resource which receives said access request so as to execute a content of the access request, comprising the steps of:

acquiring at least one of a logical distance and a geographical distance from at least one of, said node and said storage resource contained in said storage group, and said storage resources contained in said storage group;

acquiring from said node, a requirement range with respect to at least one of said logical distances and said geographical distances; and

selecting at least one storage resource for executing the access request issued from said node from said storage group, while at least one of said requirement range with respect to said logical distance and said requirement range with respect to said geographical distance is set as a selecting condition.

2. A storage resource operation managing method as claimed in claim 1 wherein:

as said storage resource selecting condition, at least one storage resource is selected which is located within said requirement range of at least one of said logical distance and said geographical

distance.

3. A storage resource operation managing method as claimed in claim 2 wherein:

within at least one storage resource located in said requirement range, at least such one storage resource is selected whose at least one of said logical distance and said geographical distance is closer than those of other storage resources.

4. A storage resource operation managing method as claimed in claim 2 wherein:

within at least one storage resource located in said requirement range, at least such one storage resource is selected, the geographic distance of which is far from the geographical distance of another storage resource.

5. A storage resource operation managing method as claimed in claim 1 wherein:

in such a case that the storage resource located within said requirement range is not present within said storage group, such a storage resource is selected whose at least one of said logical distance and said geographical distance is closer than those of another storage resource from said storage group.

6. A storage resource operation managing method as claimed in claim 1 wherein:

in such a case that the storage resource located within said requirement range is not present within said storage group, such a storage resource is

newly added whose at least one of said logical distance and said geographical distance is located within said requirement range.

7. A storage resource operation managing method as claimed in claim 1 wherein:

with respect to at least a first storage resource contained in said storage group,

a requirement range with respect to a geographical distance from said first storage resource is acquired;

a second storage resource is selected from said storage group located within the requirement range with respect to said geographical distance from said first storage resource, or a second storage within the requirement range with respect to said geographical distance from said first storage resource;

copied data as to at least a data portion of such data stored in said first storage resource is stored into said second storage resource; and

in the case that an occurrence of a trouble of said first storage resource is detected, the access request issued from said node, which is transmitted to said first storage resource, is executed with respect to said copied data of the data stored in said second storage resource.

8. A storage resource operation managing method as claimed in claim 1 wherein:

in such a case that a geographical location

of said node is changed from a first setting position to a second setting position, a judgement is made as to whether or not a logical distance defined from said node set at the second setting position up to such a storage resource which executes an access request transmitted by said node is located within said requirement range; and

when the logical distance from said second setting position is located within said requirement range, the data stored in said storage resource is not moved into another storage resource.

9. In a storage network which is arranged by a node for transmitting an access request via a network to a storage; a storage group constituted by at least one storage resource which receives said access request so as to execute a content of the access request; and a management server,

said management server comprising:

means for acquiring at least one of a logical distance and a geographical distance from at least one of, said node and said storage resource contained in said storage group, and said storage resources contained in said storage group;

means for acquiring from said node, a requirement range with respect to at least one of said logical distances and said geographical distance; and

means for selecting at least one storage resource for executing the access request issued from

Year	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100
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